FACT SHEET

Permeable Reactive Barrier:
Groundwater cleanup remedy to be tested on Dunn Field

May 2006 – As part of their commitment to use the safest and most effective cleanup technologies available, the environmental team at the former Memphis Depot will conduct a Permeable Reactive Barrier (PRB) pilot study in the area west of Dunn Field beginning on May 16, 2006.

As outlined in the Dunn Field Record of Decision (ROD), the installation of a PRB is one of the major components of the selected remedy to treat affected groundwater. PRBs have been implemented at many sites across the country to significantly reduce concentrations of chlorinated volatile organic compounds (CVOCs) in groundwater.

The primary objective of this project is to test a new construction method for PRBs and, secondly, the potential effect on CVOCs in groundwater west of Dunn Field. The results of the pilot study will be part of the *Off-Depot Groundwater Remedial Design* (RD), which will define the technical specifications and schedule for the groundwater remedy. The RD, which is expected to be completed and available to the public in Summer 2007, will present the location where the full-scale PRB will be installed. A public briefing will be scheduled in Winter 2007 to share this information with the community.

As presented in the Dunn Field ROD, a PRB will be installed underground across the natural flow path of impacted groundwater west of Dunn Field. The PRB will contain granular Zero-Valent Iron (ZVI) material that results in a natural reaction when CVOCs in the groundwater come into contact with the ZVI. This treatment method has proven successful in breaking down CVOCs into safe compounds that degrade naturally over time.

CH2M HILL will oversee the pilot study, which will be conducted west of Dunn Field, along a vacant lot west of Rozelle Street and south of the Canadian National railroad tracks. The Depot and its contractors will make every effort to minimize noise and disturbance to the community. The study is expected to take approximately three weeks, followed by six months of confirmation sampling to ensure the effectiveness of the PRB.

The Dunn Field ROD and other documents pertinent to this study are available for public review in the Depot's Information Repositories located at the Cherokee Branch Library and the Memphis Depot Business Park.

For more information, please call the Memphis Depot Community Relations Office at (901) 774-3683.